

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Isabelle Guyon et al.

Serial No. 10/057,849

Filed: January 24, 2002

For: METHODS OF IDENTIFYING
PATTERNS IN BIOLOGICAL
SYSTEMS AND USES THEREFOR



Group Art Unit: 2121

Examiner: George S. Davis

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with 37 CFR Sections 1.97 and 1.98, the items identified in this Information Disclosure Statement ("IDS") are brought to the attention of the Office. The items are listed on the attached form PTO/SB/08A and PTO/SB/08B. Copies of non-U.S. patent documents are enclosed herewith.

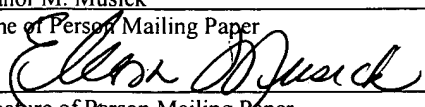
The items identified in this IDS may or may not be "material" pursuant to 37 CFR 1.56. The submission thereof by Applicants is not to be construed as an admission that any such patent, publication or other information referred to therein is material or considered to be

CERTIFICATE OF MAILING
(37 CFR 1.8a)

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as Express Mail No. EV 450899772 US in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

March 3, 2005
Date of Deposit

Eleanor M. Musick
Name of Person Mailing Paper

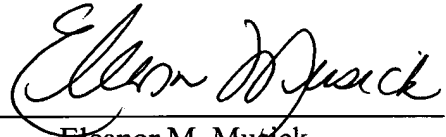

Signature of Person Mailing Paper

material (37 CFR 1.97(h)), or even qualifies as "prior art" under 35 USC 102 with respect to this invention unless specifically designated by Applicant as such.

No fees are believed to be due in connection with this filing; however, in the event it is determined that fees are required for this filing, the Commissioner is hereby authorized to charge any fees required by the filing of these papers to Procopio's Deposit Account No. **50-2075**.

Respectfully submitted,

Dated: March 3, 2005

By: 
Eleanor M. Musick
Reg. No. 35,623

Procopio, Cory, Hargreaves & Savitch LLP
530 B Street, Suite 2100
San Diego, California 92101
Telephone: (760) 931-9700
Facsimile: (760) 931-1155

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

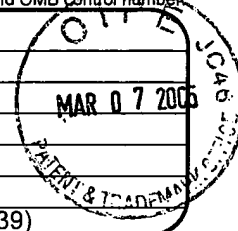
1

of

2

Complete if Known

Application Number	10/057,849
Filing Date	01-24-2002
First Named Inventor	Isabelle Guyon
Art Unit	2121
Examiner Name	George B. Davis
Attorney Docket Number	0161 (112092-0039)

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	AA	US- 4,881,178-B1	11-14-1989	Holland	
	AB	US- 5,138,694-B1	08-11-1992	Hamilton	
	AC	US- 5,649,068-B1	07-15-1997	Boser	
	AD	US- 5,809,144-B1	09-15-1998	Sirbu	
	AE	US- 5,950,146-B1	09-7-1999	Vapnik	
	AF	US- 6,128,609-B1	10-03-2000	Barnhill	
	AG	US- 6,134,344-B1	10-17-2000	Burges	
	AH	US- 6,157,921-B1	12-05-2000	Barnhill	
	AI	US- 6,427,141-B1	07-30-2002	Barnhill	
	AJ	US- 6,658,395-B1	12-03-2003	Barnhill	
	AK	US- 6,714,925-B1	03-30-2004	Barnhill	
	AL	US- 6,760,715-B1	07-06-2004	Barnhill	
	AM	US- 6,789,069-B1	09-07-2004	Barnhill	
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	10/057,849
				Filing Date	01-24-2002
				First Named Inventor	Isabelle Guyon
				Group Art Unit	2121
				Examiner Name	George B. Davis
Sheet	2	of	2	Attorney Docket Number	0161 (112092-0039)

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	BA	ALON, U., et al., "Broad patterns of gene expression revealed by clustering analysis of tumor and normal colon tissues probed by oligonucleotide arrays", <i>Proc. Natl. Acad. Sci. USA</i> , June 1999, pp. 6745-6750, Vol. 96, Cell Biology	
	BB	BLUM, A.L., et al., "Selection of Relevant Features and Examples in Machine Learning", <i>Artificial Intelligence</i> , Dec. 1997, pp. 245-271, Vol. 97.	
	BC	BREDENSTEINER, E.J., et al., "Multicategory Classification by Support Vector Machines", <i>Computation Optimizations and Applications</i> , 1999, pp. 53-79, Vol. 12	
	BD	BROWN, M.P.S., et al., "Knowledge-based analysis of microarray gene expression data by using support vector machines", <i>Proc. Natl. Acad. Sci. USA</i> , Jan. 4, 2000, pp. 262-267, Vol. 97, No. 1	
	BE	DEVIJVER, P., et al., <i>Pattern Recognition. A Statistical Approach</i> , 1982, pp. 218-219, Prentice-Hall International, London	
	BF	FUREY, T.S., et al., "Support vector machine classification and validation of cancer tissue samples using microarray expression data", <i>Bioinformatics</i> , 2000, pp. 906-914, Vol. 16, No. 10	
	BG	GOLUB, T.R., et al., "Molecular Classification of Cancer: Class Discovery and Class Prediction by Gene Expression Monitoring", <i>Science</i> , Oct. 15, 1999, pp. 531-537, Vol. 286	
	BH	GUYON, I., et al., "An Introduction to Variable and Feature Selection", <i>Journal of Machine Learning Research</i> , 2003, pp. 1157-1182, Vol. 3	
	BI	HASTIE, T., et al., "Gene Shaving: a New Class of Clustering Methods for Expression Arrays", Technical Report, Stanford University, 2000, pp. 1-40	
	BJ	KOHAVER, R., "The Power of Decision Tables", <i>European Conference on Machine Learning (ECML)</i> , 1995, 16 pages	
	BK	KOHAVER, R., and JOHN, G.H., "Wrappers for Feature Subset Selection", <i>Artificial Intelligence</i> , Dec. 1997, pp. 273-324, Vol. 97, Issue 1-2, Special issue on relevance	
	BL	LE CUN, Y., et al., "Optimal Brain Damage", <i>Advances in Neural Information Processing Systems 2</i> , 1990, pp. 598-605	
	BM	MUKHERJEE, S., et al., "Support Vector Machine Classification of Microarray Data", Technical Report CBCL Paper 182, AI, Memo 1676 M.I.T., 1998	
	BN	WESTON, J., et al., "Feature Selection for SVMs", <i>Proc. 15th Conference on Neural Information Processing Systems (NIPS)</i> , 2000, pp. 668-674	
	BO	ZHANG, X. and WONG, W., "Recursive Sample Classification and Gene Selection based on SVM: Method and Software Description", Technical Report, Department of Biostatistics, Harvard School of Public Health, 2001, 5 pages	
	BP	GUPTA, P., et al., "Beam Search for Feature Selection in Automatic SVM Defect Classification", <i>16th International Conference on Pattern Recognition (ICPR'02)</i> , Aug. 2002, p. 20212, Vol. 2 (abstract only)	
Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.